

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A semiconductor device comprising:

a semiconductor substrate;

a source region and a drain region, which are formed on the semiconductor substrate with

a channel region therebetween;

a floating gate electrode that is formed on the channel region with a gate insulator film

therebetween;

a ferroelectric film that is formed on the floating gate electrode; and

a control gate electrode that is formed on the ferroelectric film;

wherein an intermediate insulator film is formed ~~directly~~ between at least one of the pairs
consisting of the floating gate electrode and the ferroelectric film, and the ferroelectric film and
the control gate electrode; and

the intermediate insulator film is made of a hafnium oxide that contains nitrogen atoms.
2. (Original) The semiconductor device according to Claim 1, wherein intermediate
insulator films are formed both between the floating gate electrode and the ferroelectric film, and
between the ferroelectric film and the control gate electrode.
3. (Original) The semiconductor device according to Claim 1, wherein the gate insulator
film is made of hafnium oxide that contains nitrogen atoms.
4. (Original) The semiconductor device according to Claim 1, wherein the intermediate
insulator film contains nitrogen atoms of not less than 0.1 atomic % and not more than 30.0
atomic %.

5. (Original) The semiconductor device according to Claim 1, wherein the intermediate insulator film contains nitrogen atoms of not less than 0.5 atomic % and not more than 10.0 atomic %.

6. (Original) The semiconductor device according to Claim 1, wherein the intermediate insulator film contains nitrogen atoms of not less than 1.0 atomic % and not more than 6.0 atomic %.

7-21. (Canceled)

22. (Previously presented) The semiconductor device according to Claim 1, wherein the floating gate electrode comprises silicon or metal.

23. (Previously presented) The semiconductor device according to Claim 1, wherein the ferroelectric film comprises silicon or metal.